

REMARKS

Claims 23-33 and 45-56 are pending in the application. Claims 1-22, 34-44 and 57-79 are canceled. Claims 23-33 and 45-56 are rejected. Claims 23, 25, 31-33, 45, 53, 54 and 56 have been amended. None of the amended claims introduce new subject matter. The amended claims introduce limitations previously found in other claims.

The objections to claim 32 and 54 have been addressed by amendment to the claims.

35 USC § 102

Claims 23, 25, 26, 28, 32, 33, 45, 47, 48, 50 and 54-56 were rejected under 35 USC 102(b) as being anticipated by Eilertsen et al (US 4,497,897; "Eilertsen"). Claims 23, 25-27, 29, 31, 32, 45, 47-49, 51 and 53-55 were rejected under 35 USC 102(b) as being anticipated by Hansen et al (US 2003/0129276; "Hansen"), further evidenced by Applicant's own disclosure.

The amendments to the claims address the rejections. The examiner dismissed the "hair straightening" and "style-maintaining" characteristics of the formulations because those aspects appeared in the preamble of the claim. In the amended claims, those characteristics are removed from the preamble and appear as functional limitations of the claimed formulations.

Independent claims 23 and 45 have been amended. These formulations comprise alkanolic acid, enzyme and a gelling agent, and cause hair to become straightened when applied to the hair. Neither Eilertsen nor Hansen disclose a formulation containing a gelling agent nor a formulation that causes hair to become straightened when applied to the hair. For this reason, claims 23 and 45 are novel over Eilertsen and Hansen. Further, all claims depending from claims 23 or 45 incorporate the limitations of claims 23 or 45, and thus are also novel over the prior art.

35 USC § 103

Claims 23-25, 30-33, 45-47, and 52-56 were rejected under 35 USC 103(a) as being unpatentable over Mueller et al (US 5,002,761; "Mueller") in view of Derwent Acc. No. 1988-157179 (Abstract of JP63096107 A; "Shiseido") and Data Sourcebook for Food Scientists and Technologists (1991, Y.H. Hui; "Hui").

Mueller is a disclosure of a hair treatment composition. Shiseido teaches a powder comprising *Aspergillus oryzae* that can be mixed with water or lotion and applied to hair. Hui teaches that *Aspergillus oryzae* contains alpha-amylase. None of these references teach a composition that contains a gelling agent, nor do they disclose that the compositions have capability to straighten hair when applied to hair. Therefore the combined teachings do not suggest the presently claimed formulations nor do they provide any motivation to alter the combinations in a manner that would create the presently claimed formulations.

Furthermore, *Aspergillus* is a known disease-causing agent, both as an allergen and as a pathogen. The alpha-amylase enzyme from *A. oryzae* has been found to be allergenic. (See, e.g., Baur, et al., 1996, "Characterization of soybean allergens causing sensitization of occupationally exposed bakers", *Allergy*: 51(5):326-30; Abstract provided herewith). Therefore, there would have been no motivation and more precisely, negative motivation, for one of skill in the art to combine the teachings of Shiseido, Hui and Mueller to formulate a hair treatment composition by adding freeze dried *Aspergillus* to a hair formulation as taught by Mueller.

For this reason, Applicant submits that the combination of teachings do not render the claimed formulations obvious. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Double Patenting

Claims 23-25, 30-33, 45-47, and 52-56 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,517,822 in view of Shiseido and Hui.

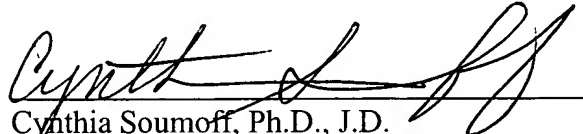
The examiner stated that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the claimed invention of US '822 by incorporating the biological cosmetic powder taught by Shiseido which comprises *A. oryzae*, which produces the α -amylase enzyme, as taught by Hui. However, in light of the known role of *Aspergillus* as an allergen and pathogen (See Baur abstract, provided), one of skill in the art would not have been motivated to combine the Shiseido powder with the invention of US '822 because of the possible ill effects that could ensue.

For this reason, Applicant submits that the combination of teachings does not render the instantly claimed formulations obvious. Applicant respectfully requests that the rejection be reconsidered and withdrawn.

In view of the foregoing, Applicants submit that all pending claims are in condition for allowance and request that all claims be allowed. The Examiner is invited to contact the undersigned should he believe that this would expedite prosecution of this application. It is believed that no fee is required. The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 13-2165.

Respectfully submitted,

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